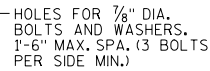


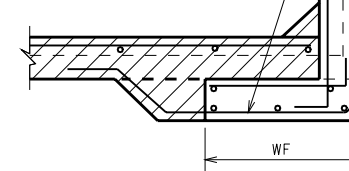
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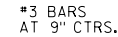
END VIEW



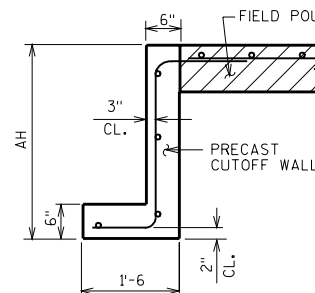
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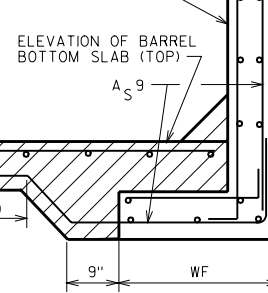
SECTION E



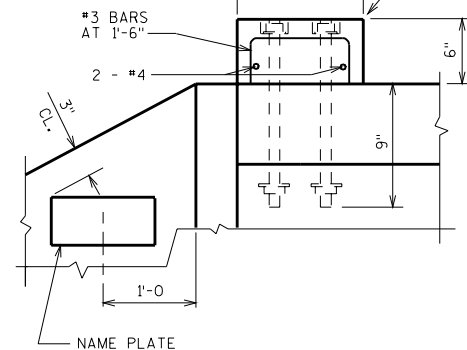
SECTION D



SECTION B



SECTION A



SECTION C

GENERAL NOTES

CONCRETE COVER ON ALL REINFORCEMENT IN THE
PRECAST ELEMENTS SHALL BE 2" UNLESS SHOWN
OR NOTED OTHERWISE.

STEEL REINFORCEMENT MAY BE EITHER GRADE 60 DEFORMED BARS ($F_y = 60,000$ P.S.I.) OR WELDED DEFORMED - WIRE FABRIC OF EQUIVALENT AREA, ($F_y = 65,000$ P.S.I.)

THE ULTIMATE COMPRESSIVE STRENGTH OF THE
FIELD POURED CONCRETE SHALL BE 3,500 P.S.I.

ALTERNATE DETAILS OF EQUAL STRENGTH AND
HYDRAULIC CAPACITY TO THE DETAILS SHOWN ON
THIS SHEET MAY BE SUBMITTED TO THE ENGINEER
FOR APPROVAL.

THE ULTIMATE COMPRESSIVE STRENGTH OF THE
CONCRETE IN THE PRECAST ELEMENTS SHALL BE
4,000 P.S.I.

THE PRECAST ELEMENTS SHALL BE PROVIDED WITH SUITABLE LIFTING DEVICES FOR HANDLING AND PLACEMENT OF THE ELEMENTS.

VERTICAL CONSTRUCTION JOINTS THRU THE WALLS AND FOOTING WILL BE ALLOWED ONLY WITH THE APPROVAL OF THE ENGINEER. DETAILS MUST BE SHOWN ON THE SHOP DRAWINGS FOR APPROVAL.

THE AREA OF REINFORCING STEEL NOT IDENTIFIED
IN SECTIONS EQUALS 0.17 IN²/FT.

THE MAXIMUM BAR SIZE OF GRADE 60 DEFORMED BARS, OTHER THAN THE A₅10 BARS, SHALL BE #5.

THE $\frac{7}{8}$ " ϕ ANCHOR BOLTS SHALL BE GALVANIZED
AND CONFORM TO THE REQUIREMENTS OF
A.S.T.M. A575.

ALL EXPOSED CORNERS SHALL BE BEVELED $\frac{3}{4}$ " ON THE SIDES OR TOOL EDGED WITH A $\frac{1}{2}$ " MINIMUM RADIUS EDGER.

PRECAST CUT OFF WALLS MAY BE FIELD SPICED BY EXTENDING THE REINFORCING STEEL FROM BOTH SEGMENTS TO BE SPICED 1'-6" INTO THE SPICE ZONE, LAPPING THE STEEL \pm 1'-6" AND FIELD POURING A SECTION OF CUT OFF WALL 1'-6" LONG.

PRECAST ELEMENTS MAY BE POURED IN PLACE AT THE OPTION OF THE CONTRACTOR.

[illegible]

SPAN (S)	A _S 10 BARS			A _S 11 IN. ² / FT.	A _S 12 IN. ² / FT.		
	SKEW				SKEW		
	0°-15°	16°-30°	31°-45°		0°-15°	16°-30°	31°-45°
6'-0"	4 #6	4 #6	4 #7	.35	.17	.17	.17
7'-0"	4 #6	4 #7	4 #7	.35	.17	.17	.19
8'-0"	4 #6	4 #7	4 #8	.42	.17	.19	.24
10'-0"	4 #7	4 #8	4 #8	.48	.19	.24	.24

RISE(R)	A _{s9} IN. ² /FT	WF
4'-0	.19	2'-6
6'-0	.24	3'-6
8'-0	.31	4'-0
10'-0	.34	4'-9

PRECAST WINGS, HEADERS AND CUTOFF WALLS FOR PRECAST CONCRETE BOX CULVERT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DEVELOPMENT SECTION

APPROVED: _____

DATE:	3/99
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